

SAHARA Regulator mkII

FROMECO

INSTRUCTIONS

Specifications and Operation

Sahara Regulators:

Fromeco Sahara regulators are designed to be used with Fromeco Relion, and Polymer packs. They can be utilized with other battery sets as long as the voltage does NOT EXCEED 12VDC. Adjustment range for output voltage is 5 to 8.5 volts. This regulator will reduce the input (battery) voltage to desired output voltage. This regulator will not make output voltage higher than input voltage. Adjustment instructions are further down this page.

Important:

This regulator must be used either with a separate switch between the battery and the regulator input -or- with an optional "soft switch" (pin and flag) accessory. The regulator uses some energy to do its function, and will slowly drain the battery over time if not properly turned off.

Observe one of these two lineups:

BATTERY >> SWITCH >> REGULATOR >> RX/IGNITION

-or-

BATTERY >> REGULATOR WITH PIN/FLAG ASSEMBLY >> RX/IGNITION

Voltage Adjustment:

There are three pins sticking out one edge of your Sahara mkII (if you orient the regulator with the input wires UP, output wires DOWN, and with the heat sink facing you, the pins will be on the "Left" edge of the regulator). These pins are used to adjust the output voltage. These pins are nothing more than shorting pins that complete a circuit. When you briefly complete the circuit between the CENTER and TOP pin, the voltage will increase by one step, and a GREEN light will blink. When you complete the circuit between the CENTER and BOTTOM pin, the voltage will decrease by one step, and a RED light will blink. If you reach the top or bottom of the adjustment range and attempt to keep going, the red or green light will appear steady instead of blinking. Any ****conductive**** metal object such as a screwdriver or paper clip can be used to adjust the voltage up or down. You will need some type of volt meter to monitor the output voltage of the regulator, as you adjust it.

The regulator comes preset at the low end of the adjustment range, about 5 volts. After adjusting the output voltage to desired value using the pins and voltmeter,

wait about a second, turn off the regulator, turn it back on again, and verify the regulator output is still at the desired value. This verifies that the regulator has correctly stored your adjustment into its solid-state memory.

Sahara with Soft Switch Function

If your SAHARA regulator is equipped with the optional "soft switch" function, there will be a 2-conductor yellow JR style male plug coming out of the regulator. Any time that the two wires in the yellow plug are connected, the regulator will shut down and the regulator will act as its own switch. This can be done by using optional Fromeco "pin and flag assembly" (also color coded yellow) to complete the shutdown circuit loop. Any time the two wires in the yellow plug are not touching each other (the metal pin with flag is removed), the regulator is ON (often referred to as "failsafe").

When the regulator is turned off using the "soft switch", it enters a very low power "sleep" mode. It uses no more than 2 mA-h per day when shut down this way.

Mounting Instructions

If you have a Super Sahara, DO NOT run the Velcro Strapping over the heat sink. DO NOT Wrap any Sahara in foam insulation. Foam beds can be used as long as the Sahara can be properly fastened to the deck, and the heat sink fins are open to cool the Sahara.

Engine Box Mounting:

If you must mount your Sahara in or on your engine box, please ensure it is mounted securely. Protect it from Vibration, Gas and Oil, hot exhaust, water. DO NOT mount a Sahara directly behind a cylinder JUG. Fromeco would prefer to not see regulators mounted in the Engine box area, however we know that sometimes there is no other option.

Please note: 99% of all Fromeco Regulator failures are caused by improper mounting of the Regulator.

Fromeco Scale Avionics LLC® warrants that at the time of shipment and for a period of ninety (90) days thereafter the Product (Fromeco Scale Avionics LLC® Sahara mkII and Super Sahara) shall conform to the functional description contained herein, and shall be free from defects in workmanship. If any defect within this warranty appears, the Purchaser shall notify FROMECO immediately. Buyer's sole and exclusive remedy in the event of a defect is expressly limited to (at Fromeco Scale Avionics LLC® sole election) correction of the defect by replacement or issuance of credit in the amount of the price of the Product, for any Product which proves defective within the above warranty. The foregoing warranties are the sole and exclusive warranties made by Fromeco Scale Avionics LLC®. THESE WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. In no event shall Fromeco Scale Avionics LLC® be liable to Purchaser, end user, or any other party or individual for any incidental, special or consequential damages of any nature that are or could be attributable to the product. Fromeco Scale Avionics LLC® maximum liability shall not exceed the purchase price of the Product under this agreement. Use of the Product by Purchaser shall constitute Purchaser's acceptance of these terms.